

INNOVATIVE PERCEPTIONS

A QUARTERLY NEWSLETTER FOR HEARING AWARENESS IN THE GREATER BOSTON AREA

DR. MELONIE MARPLE
AUDIOLOGY AND HEARING SOLUTIONS, INC.
WWW.AUDIOLOGYHEARING.NET

FALL EDITION 2017

Your trusted hearing healthcare professionals

Auditory Deprivation: Use it or lose it?!



Fact:

Audiologists are the primary healthcare professionals who evaluate, diagnose, treat, and manage hearing loss and balance disorders in adults and children.

Don't entrust your hearing to just anyone; come and see us at AHS: your trusted hearing healthcare professionals.

Fun hearing facts: (from www.Scolastic.com)

 Crickets have their hearing organs in

• Cicadas have their hearing organs in their stomachs.

their knees.

 Male mosquitoes hear with thousands of tiny hairs growing on their antennae



facebook.com/ audiologyhearingsolutionsinc.net

Take a moment to "Like" us on Facebook and "Follow" our page to keep up-to-date with all things hearing! Also, don't forget to "Check In" when you are at our office.

Everyone has heard the old adage, "use it or lose it", especially when it comes to aging, but is this same train of thought applicable to hearing loss? Researchers have been studying this for years and there is truth to this phenomenon as it relates to hearing loss and the effects

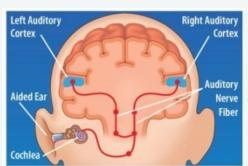
it has on the brain. Adult onset auditory deprivation is "the systematic decrease in auditory performance over time as associated with the reduced availability of acoustic information" (Arlinger et al., 1996, p.875). This means, when the brain cannot get the information that it needs from the ears, there is a marked decrease in hearing and comprehension. The processing

and understanding of speech is completed in the brain, not in the ear. So when information to the brain is reduced due to hearing loss, that area of the brain then becomes "lazy" and the person's ability to understand speech declines over time. This phenomenon has been confirmed by assessing individuals who have equal

hearing loss in both ears, but utilized only one hearing aid. The ability to understand speech in the ear without the hearing aid is significantly lower than the speech in the ear that was consistently using the hearing aid. There are certainly many variables that can affect the degree of

auditory deprivation, such as severity of hearing loss, overall cognitive function and how well the hearing aids are fit. Improperly fit hearing aids can also affect the amount of input getting to the brain and contribute to auditory deprivation. The science is now showing us that neural reorganization (the change in how the brain responds to sound) begins with hearing loss as early as mild high frequency hearing losses and that using appropriately fit

hearing aids can help to reverse the reorganization process back towards pre-hearing loss levels. This means that even before identifiable communication disorders show up, using the best fit hearing aids can have lasting benefits for hearing health. Don't wait to get your hearing tested and seek help from qualified audiologists.



What is tinnitus and what can be done about it?

Tinnitus, pronounced [ti-nah-tus], is a widespread disabling condition. The definition of tinnitus, according to Merriam-Webster, is "a sensation of noise (such as ringing or roaring) that is typically caused by a bodily condition and is usually of the subjective form which can only be heard by the one affected". It is estimated that 10-15% of the population experiences chronic tinnitus. Most people at some time in their lives will experience tinnitus, but this is typically short term and does not continue. For those who experience long-term or chronic tinnitus, it can cause significant health related issues and decrease their quality of life.

Tinnitus can range from high pitch ringing to low pitch buzzing or even hearing familiar songs. The most accepted cause for tinnitus is the "disregulation of the central auditory processing induced by altered cochlear inputs" (Jastreboff, 1990). This means that some degree of damage has occurred in the inner ear. The brain interprets this damage as sound, with or without an actual sound being present, thus making it's own "phantom" sound heard by the individual. Tinnitus most often occurs after trauma to the ear, such as sustained loud sound (constant fire alarms, bombs, fireworks) or some form of head trauma. Tinnitus can also occur if there is pressure being put on the inner ear, which can be a sign of a more significant health condition. Anyone experiencing tinnitus, should always be evaluated by an audiologist or physician to rule out any possible underlying medical issues.



There is no cure for tinnitus, and up until now, treatment has focused on learning how to deal with it through behavioral management. However, Otoharmonics has developed the Levo System—a sleep therapy, which provides sound stimulation as we sleep to help our brains habituate or get used to the tinnitus sound. This is based on the knowledge that the auditory system never sleeps and we can teach our brain to ignore bothersome sounds. The idea is similar to someone living near train tracks. When someone first moves there, they may notice the trains at all hours of the night. But over time, your brain learns to ignore the noise. The initial studies of the Levo System treatment have been very promising, so much so that we have started to offer this treatment at our practice. This system comes with objective data tracking that enables us to graphically see if the tinnitus is decreasing. So far, we've had positive results. If you or someone you know, experiences tinnitus and it is affecting their quality of life, give us a call. There is a 30 day no-risk trial to ensure it is the right treatment for you.



Your trusted hearing healthcare professionals!

955 Main St., Suite 306 Winchester, MA 01890

Phone: 781-218-2225 Fax: 781-218-2226

WE'RE ON THE WEB!

AUDIOLOGYHEARING.NET

AUDIOLOGY AND HEARING SOLUTIONS, INC

Dear Friends,

Another summer has come and gone, but now it is time for my favorite season: Fall! The season of leaves changing, cool nights, football and of course everything pumpkin! October is also National Audiology Awareness Month. Unfortunately, hearing loss is often over looked, misdiagnosed or just plan ignored. If left untreated, hearing loss can affect all aspects of our health and well being. Hearing healthcare IS important to our overall health. Encourage your friends and family to get a baseline hearing evaluation and annual testing to ensure they are not missing the sounds of life. Spread the word: Eyes checked, teeth checked, EARS checked!

Sincerely,

Dr. Melonie Marple



955 Main St., Suite 306 Winchester, MA 01890

